



IN THE CLAIMS:

1. (Currently amended) A ball screw comprising

a shaft (2) having a ~~given~~ longitudinal axis (3) and an external thread (5);

a spiral casing (6) mounted coaxially with said shaft (2);

at least one set of balls interposed between the shaft (2) and the casing (6); and

two seals (16) fitted, coaxially with said axis (3), between the shaft (2) and the casing (6) to define, together with the shaft (2) and the casing (6), a chamber (17) for containing lubricant; ~~and characterized in that~~ wherein each seal (16) comprises an annular member (18) made of a first material having a first coefficient of thermal expansion; and at least one insert (19) ~~located inside~~ fully embedded within said annular member (18) and being made of a second material having a second coefficient of thermal expansion lower than said first coefficient.

2. (Original) A screw as claimed in Claim 1, wherein said insert (19) is an annular insert.

3. (Original) A screw as claimed in Claim 1, wherein said insert (19) has a substantially circular cross section.

4. (Original) A screw as claimed in Claim 1, wherein said first material is a plastic material.

5. (Original) A screw as claimed in Claim 1, wherein said first material is a polymer material.
6. (Original) A screw as claimed in Claim 1, wherein said second material is a metal material.
7. (Original) A screw as claimed in Claim 1, wherein each annular member (18) is defined externally by a surface (18a) substantially coaxial with said axis (3), comprises an annular recess (28) opening outwards at said surface (18a), and has an O-ring (29) housed in said annular recess (28).
8. (Original) A screw as claimed in Claim 1, wherein each annular member (18) is defined axially by two surfaces (20) substantially perpendicular to said axis (3), and comprises a number of teeth (23) projecting axially from one of said surfaces (20) and equally spaced about said axis (3).
9. (Original) A screw as claimed in Claim 8, wherein each tooth (23) is substantially sector-shaped.
10. (Original) A screw as claimed in Claim 1, wherein each annular member (18) has an internal thread (22) of substantially the same hand as the external thread (5).
11. (New) A screw as claimed in Claim 1, wherein said shaft (2) is made of a

same type of material as said second material of said insert (19).

12. (New) A screw as claimed in Claim 1, wherein said spiral casing (6) is made of a same type of material as said second material of said insert (19).

13. (New) A screw as claimed in Claim 1, wherein said shaft (2) and said spiral casing (6) are made of a same type of material as said second material of said insert (19).

14. (New) A ball screw comprising

 a shaft;

 a spiral casing mounted coaxially with the shaft;

 two seals, fitted coaxially with the shaft, between the shaft and the casing to define, together with the shaft and the casing, a chamber for containing lubricant between the seals; wherein the shaft and the casing have a first coefficient of thermal expansion; each of the seals has a second coefficient of thermal expansion, and comprises an annular member and at least one insert fully embedded within the annular member whereby a difference between the first coefficient of thermal expansion of the shaft and the casing, and the second coefficient of thermal expansion of the seals is small.